

REMARKS/ARGUMENTS

Favorable reconsideration of the application as currently amended and in view of the following remarks, is respectfully requested.

Claims 1, 2, 4-6, 9, 12, 15 and 16 are currently pending in the application. Claims 3, 7, 8, 11, 13 and 14 have been canceled. Claims 1, 9, 12 and 15 have been amended. The basis for the amendments can be found at least in Figures 25 and 72 and their related descriptions as well as the description on page 87, lines 16-21 of the specification. No new matter has been added.

By way of summary, the Official Action presents the following issues. The Title of the invention has been objected to as not being descriptive. Claims 2 and 16 were rejected on the ground of non-statutory obviousness-type double patenting as being unpatentable over Claim 2 of U.S. Patent 7,418,705. Claim 13 was rejected on the ground of non-statutory obviousness-type double patenting as being unpatentable over Claim 8 of U.S. Patent 7,418,705 in view of Day et al. (U.S. 2004/0249995, hereinafter “Day”). Claims 1, 3, 4, 6, 9, 11 and 15 were rejected under 35 U.S.C. § 103 as being unpatentable over Alfieri (US 5,745,778) in view of Strout II (US 5,339,415, hereinafter “Strout”). Claims 2, 10, and 15 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Alfieri in view of Strout and further in view of Day. Claims 5 and 12 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Alfieri in view of Strout and Galpin (US 7,043,728). Claims 7, 8, and 13-14 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Strout in view of Day.

Turning first to the objection of the Title, the Title has been changed to “Scheduling System and Method in which Threads for Performing a Real-Time Operation are assigned to a Plurality of Processors.” Accordingly, Applicants request that this objection to the Title be withdrawn.

Turning next to the rejection of Claims 2, 13, and 16 on the basis of non-statutory obviousness-type double patenting, Applicants have filed a Terminal Disclaimer. Accordingly, Applicants request that the obviousness-type double patenting rejections be withdrawn.

Turning next to the rejection of Claims 1, 4, 6, 9 and 15 under 35 U.S.C. § 103 as being unpatentable over Alfieri in view of Strout, the Official Action (page 16) takes the position that Alfieri is explicitly silent in performing a scheduling operation of dispatching the tightly coupled threads to several of the processors that are equal in number to the tightly coupled threads to simultaneously execute the tightly coupled threads by the several of the processors. To overcome this deficiency of Alfieri, the Official Action turns to Strout for teaching of a multiprocessing computer system that can simultaneously execute multiple threads to schedule and dispatch for the operating system to a dedicated plurality of processors. The Official Action relies on the Abstract, column 1, lines 34-45, column 5, line 37, and column 7, lines 10-15 for teaching of this feature.

Each of Applicants' independent claims has been amended to recite that "a reserving section configured to reserve execution terms of the tightly coupled threads in several processors of the plurality of processors, the reserved execution terms having the same execution start timing and the same term, the several processors being equal in number to the tightly coupled threads, and an executing section configured to simultaneously execute a tightly coupled threads and reserved execution terms by several processors." Thus, each of independent Claims 1, 9 and 15 recite that all of the reserved execution terms have the same execution start timing and the same term. In other words, all threads that belong to a tightly coupled thread group start the execution at the same time and end at the same time as shown in Figures 25, 48, and 72 of the application. Thus, it is clear that all threads that belong to a tightly coupled thread group are always simultaneously in a running state. As a result,

communications between the threads can be carried out with efficiency. The Official Action asserts that Strout teaches the multiprocessor computer system that can simultaneously execute multiple threads that are each scheduled and dispatched, by the operating system, to the dedicated plurality of processors. However, Official Action, Applicants find that Strout does not disclose the features of “reserving execution terms of the tightly coupled threads in several processors of the plurality of the processors, the reserved execution terms having the same execution start timing and the same term, the several processors being equal in number to the tightly coupled threads, and simultaneously executing the tightly coupled threads in reserved execution terms by the several processors.” Accordingly, Applicants find that Strout fails to remedy the deficiencies of Alfieri and that the rejection of Claims 1, 4, 6, 9, 11, and 15 should be reconsidered and withdrawn.

Turning next to the rejection of Claims 2, 5, 10, 12, 6, none of Alfieri, Day, or Galpin provide a teaching or suggestion of having the reserved execution terms having the same execution start timing and the same term. Accordingly, all of the applied references whether considered together or singly, fail to suggest the limitations now found in Applicants’ independent Claims 1, 9 and 15 as currently amended.

From all of the above, Claims 1, 2, 4-6, 9, 10, 12, 15 and 16 are believed to be in condition for allowance. An early indication to that effect is respectfully requested.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.



Eckhard H. Kuesters
Attorney of Record
Registration No. 24,913

Stuart S. Levy
Registration No. 61,474

Customer Number
22850

Tel: (703) 413-3000
Fax: (703) 413 -2220
(OSMMN 08/07)